

Linzer biol. Beitr.	40/2	1295-1299	19.12.2008
---------------------	------	-----------	------------

The first species of *Cantaberella* from the western Pyrenees (Coleoptera: Staphylinidae: Aleocharinae)

V. ASSING & M. TRONQUET

A b s t r a c t : *Cantaberella pyrenaica* nov.sp. (France/Spain: western Pyrenees: Pic d'Orhy), the fourth representative of the genus and the first record of the genus from the Pyrenees, is described and illustrated. A key to the species of *Cantaberella* is provided. The distribution of the genus is mapped.

K e y w o r d s : Coleoptera, Staphylinidae, Aleocharinae, *Cantaberella*, France, Spain, Pyrenees, taxonomy, new species.

Introduction

Cantaberella TRONQUET 1998, originally described as a subgenus of *Alpinia* BRUNDIN 1948 and subsequently regarded as a distinct genus, previously included three species, all of them local endemics in northern Spain: the type species *C. pacei* (TRONQUET 1998) from the Pico de Tres Mares (Cantabria), *C. feldmanni* ASSING 2000 from the Sierra del Teleno (León), and *C. tenebrosa* ASSING 2003 from the Picos de Europa (Cantabria).

During a recent field trip conducted by the second author to the Pyrénées-Atlantiques, two specimens of a fourth species was discovered, the first record of the genus from the Pyrenees and from France.

Material and methods

The holotype is deposited in the collection of the second author, the paratype in the collection of the first author.

The morphological studies were carried out using a Stemi SV 11 microscope (Zeiss Germany), a stereomicroscope SZH10 (Olympus) equipped with a photo tube, a compound microscope BX41 (Olympus) with a photo tube and equipped for transmitted and reflected light, and a digital reflex camera D2X (Nikon).

The map was generated using the online generic mapping tool (GMT) of the Geomar website at www.aquarius.ifm-geomar.de/omc.

Head length was measured from the anterior margin of the clypeus to the posterior margin of the head, elytral length at the suture from the apex of the scutellum to the posterior margin of the elytra.

***Cantaberella pyrenaica* nov.sp.** (Figs 1-7, Map 1)

Type material: Holotype ♂: "SPAIN - Navarra, Pic d'Orhy, 1820 m, 23.VI.2007, M. Tronquet / Holotypus ♂ *Cantaberella pyrenaica* sp.n. det. Assing & Tronquet 2008. Paratype: 1 ♂: "FRANCE - Pyrénées-Atlantiques, Port de Larrau - Pic d'Orhy, 1560 m, 20.VI.2007, leg. M. Tronquet".

Description: Body length 1.7-1.8 mm. Habitus as in Fig. 1. Coloration: forebody blackish-brown, abdomen black, with the apex only indistinctly paler; legs pale-brownish; antennae brown, with antennomeres I-III yellowish-brown.

Head approximately 1.1 times as wide as long, distinctly widened behind eyes, widest near posterior angles; punctuation fine, shallow, moderately dense in lateral dorsal areas and sparse in median dorsal area; microsculpture very shallow, almost obsolete, surface glossy; eyes small, approximately 1/3 the length of postocular region in dorsal view. Antenna distinctly incrassate apically; antennomeres I and II of subequal length; III weakly oblong and distinctly shorter than II; IV-X of increasing width and increasingly transverse; X approximately twice as wide as long.

Pronotum approximately 1.2 times as wide as long and 1.1 times as wide as head; posterior angles broadly rounded, almost completely obsolete; punctuation rather dense and much more distinct than that of head; interstices glossy, with very shallow, somewhat isodiametric microsculpture (not visible at lower magnification) (Fig. 2); pubescence directed caudad along midline.

Elytra at posterior margin slightly wider than pronotum and very short, at suture only approximately 0.5 times as long as pronotum; punctuation of similar density as that of pronotum, but slightly more distinct; interstices with very shallow diagonal microsculpture (not visible at lower magnification) and glossy (Fig. 3). Hind wings reduced.

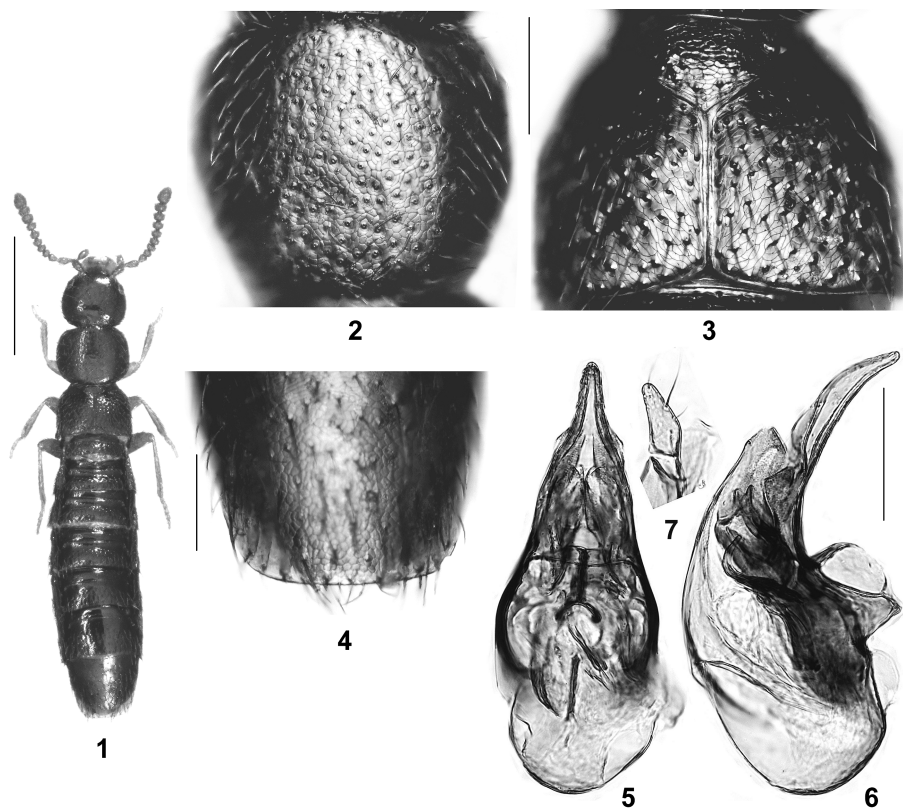
Abdomen approximately 1.1 times as wide as elytra at posterior margin, widest at segment V-VI; punctuation fine, denser on anterior than on posterior tergites; posterior margin of tergite VII without palisade fringe.

♂: posterior margin of tergite VII weakly and broadly concave; tergite VIII distinctly transverse, its posterior margin weakly convex; sternite VIII much longer than tergite VIII, approximately as long as wide, its posterior margin weakly convex, almost truncate (Fig. 4); median lobe of aedeagus with remarkably long ventral process of distinctive shape (Figs 5-6); apical lobe of paramere as in Fig. 7.

♀: unknown.

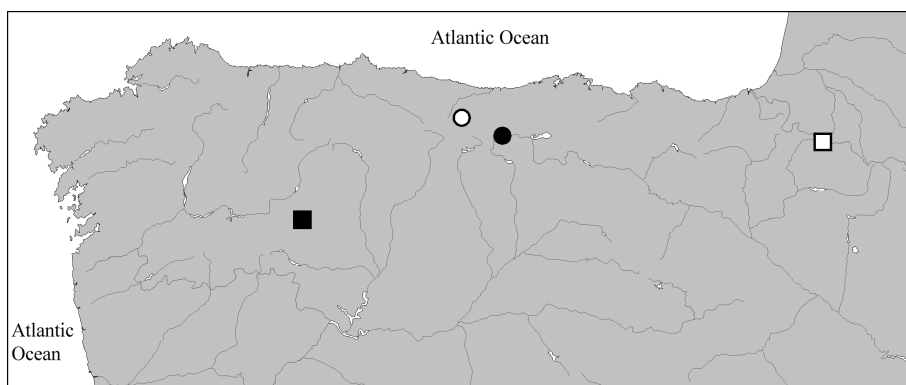
Etymology: The name (adjective) refers to the fact that this species is the first - and only - known representative of the genus in the Pyrenees.

Comparative notes: *Cantaberella pyrenaica* is readily distinguished from all its congeners not only by the distinctive shape of the median lobe of the aedeagus, but also by the shape of the male sternite VIII and the glossy appearance of the forebody. From *C. pacei* and *C. feldmanni*, it is additionally separated by much darker coloration especially of the forebody and the appendages. For illustrations of the sexual characters and other characters of the previously described species see TRONQUET (1998) and ASSING (2000, 2003).



Figs 1-9: *Cantaberella pyrenaica* nov.sp.: (1) habitus; (2) dorsal surface of pronotum; (3) elytra; (4) posterior portion of male sternite VIII; (5-6) median lobe of aedeagus in ventral and in lateral view; (7) apical lobe of paramere. Scale bars: 1: 0.5 mm; 2-7: 0.1 mm.

Distribution and bionomics: The species was found both on the French and on the Spanish side of the Pic d'Orhy, in the Pyrénées-Atlantiques and Navarra, respectively. The discovery of this species considerably expands the known distribution of the genus eastwards (Map 1). The specimens were collected on alpine limestone meadows under stones at altitudes of 1560 and 1820 m.



Map 1: Distribution of the species of *Cantaberella* TRONQUET in the northern Iberian Peninsula: *L. feldmanni* ASSING (filled square), *L. tenebrosa* ASSING (open circle), *L. pacei* (TRONQUET) (filled circle), and *L. pyrenaica* nov.sp. (open square).

Key to the species of *Cantaberella*

The references to illustrations in the literature are abbreviated as follows: A00 = ASSING (2000); A03 = ASSING (2003); T98 = TRONQUET (1998).

- 1 Forebody, including the appendages, yellowish, distinctly paler than the abdomen.....2
- Forebody dark-brown to blackish-brown, as dark as the abdomen or nearly so; antennae brown to dark-brown.....3
- 2 ♂: posterior margin of tergite VIII distinctly emarginate in the middle (Fig. A00: 12); posterior margin of sternite VIII strongly convex (Fig. A00: 13); median lobe of aedeagus as in Fig. T98: 2. ♀: posterior margin of sternite VIII more broadly incised in the middle (Fig. A00: 15); spermatheca as in Figs T98: 3-5. Cantabria: Pico de Tres Mares (Map 1)..... *C. pacei* (TRONQUET)
- ♂: posterior margin of tergite VIII almost truncate, not distinctly emarginate in the middle (Fig. A00: 8); posterior margin of sternite VIII moderately convex (Fig. A00: 9); median lobe of aedeagus as in Figs A00: 4-5. ♀: posterior margin of sternite VIII more narrowly incised in the middle (Fig. A00: 11); spermatheca as in Fig. A00: 7. León: Sierra del Teleno (Map 1). *C. feldmanni* ASSING
- 3 Forebody with shallow, but distinct microsculpture and subdued luster. Punctuation of pronotum extremely fine, barely visible, and rather sparse. Elytra longer, approximately 0.6 times as long as pronotum (Fig. A03: 3). ♂: sternite VIII strongly convex posteriorly (Fig. A03: 5); median lobe of aedeagus with short and in lateral view subapically angled ventral process (Figs A03: 7-10). ♀: sternite VIII and spermatheca as in Figs A03: 6, 11. Cantabria: Picos de Europa (Map 1)..... *C. tenebrosa* ASSING
- Forebody glossy, microsculpture very shallow, visible only at high magnification. Pronotum with distinct and rather dense punctuation. Elytra shorter, approximately 0.5 times as long as pronotum (Fig. 1). ♂: sternite VIII weakly convex, almost truncate posteriorly (Fig. 4); ventral process of aedeagus conspicuously long and in lateral view arched (Figs 5-6). ♀: unknown. Western Pyrenees: Pic d'Orhy (Map 1)..... *C. pyrenaica* nov.sp.

Zusammenfassung

Cantaberella pyrenaica nov.sp. (Westpyrenäen: Pic d'Orhy), die vierte Art der Gattung und der erste Nachweis der Gattung aus den Pyrenäen, wird beschrieben und abgebildet. Eine Bestimmungstabelle der *Cantaberella*-Arten wird erstellt. Die Verbreitung der Gattung wird anhand einer Karte illustriert.

References

- ASSING V. (2000): A new species of *Cantaberella* TRONQUET 1998 from northwestern Spain (Coleoptera: Staphylinidae, Aleocharinae). — Linzer biologische Beiträge **32** (1): 79-84.
- ASSING V. (2003): The third species of *Cantaberella* TRONQUET from northern Spain (Coleoptera: Staphylinidae, Aleocharinae). - Linzer biologische Beiträge **35** (2): 701-704.
- TRONQUET M. (1998): *Alpinia* (*Cantaberella*) *pacei* n.subgen., n.sp. d'Espagne, un sous-genre nouveau et une espèce nouvelle de la cordillère Cantabrique (Coleoptera, Staphylinidae). — Bulletin de la Société Entomologique de France **103**: 287-289.

Authors' addresses: Dr. Volker ASSING
 Gabelsbergerstr. 2
 D-30163 Hannover, Germany
 E-mail: vassing.hann@t-online.de

 Marc TRONQUET
 10 Carrer Llimberga
 F-66500 Molitg les bains, France
 E-mail: marctronquet@wanadoo.fr